## WHAT IS CLAIMED IS:

A video reproducing apparatus for reproducing a plurality of digital video signals having different frame frequencies, comprising:

frame frequency discriminating means for discriminating a frame frequency of an inputted digital video signal; and

pixel number converting means for replacing differences among said frame frequencies by differences among the numbers of horizontal pixels for said plurality of digital video signals having the different frame frequencies and performing a conversion of the number of pixels so that said plurality of digital video signals having the different frame frequencies can be processed by a common clock frequency,

wherein the number of horizontal pixels of said pixel number converting means is properly set in accordance with an output of said frame frequency discriminating means.

2. An apparatus according to claim 1, wherein said pixel number converting means converts the number of pixels so that a ratio of the numbers of horizontal pixels of said plurality of digital video signals is set to a reciprocal number of a ratio of the frame frequencies of said plurality of digital video signals.

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- 3. An apparatus according to claim 1, wherein said frame frequency discriminating means discriminates the frame frequency by extracting frame frequency discrimination information included in a broadcasted digital video signal.
- An apparatus according to claim 1, wherein said pixel number converting means sets the different numbers of horizontal pixels in a case where said inputted digital video signal is a standard video signal and a case where it is a high definition video signal, respectively.
- 5. An apparatus according to claim 4, wherein the number of horizontal pixels which is set into said pixel number converting means in case of the standard video signal and the number of horizontal pixels which is set into said pixel number converting means in case of the high definition video signal are selected to proper values at the time of designing of said video reproducing apparatus, so that a clock frequency in case of processing the standard video signal and a clock frequency in case of processing the high definition video signal are set to near frequencies.
- 6. A video reproducing method of reproducing a plurality of digital video signals having different

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frame frequencies, comprising the steps of:

discriminating the frame frequency of said digital video signal;

replacing differences among said frame frequencies by differences among the numbers of horizontal pixels for said plurality of digital video signals having the different frame frequencies and performing a conversion of the number of pixels so that said plurality of digital video signals having the different frame frequencies can be processed by a common clock frequency; and

properly setting the number of horizontal pixels after completion of the conversion of the number of pixels in accordance with said discriminated frame frequency.

- 7. A method according to claim 6, wherein the number of pixels is converted so that a ratio of the numbers of horizontal pixels of said plurality of digital video signals is set to a reciprocal number of a ratio of the frame frequencies of said plurality of digital video signals.
- 8. A method according to claim 6, wherein the frame frequency is discriminated by extracting frame frequency discrimination information included in a broadcasted digital video signal.

- 9. A method according to claim 6, wherein the number of horizontal pixels after completion of said pixel number conversion is set to the different numbers of horizontal pixels in a case where said inputted digital video signal is a standard video signal and a case where it is a high definition video signal, respectively.
- 10. A method according to claim 9, wherein the number of horizontal pixels which is set in case of the standard video signal and the number of horizontal pixels which is set in case of the high definition video signal are selected so that a clock frequency in case of processing the standard video signal and a clock frequency in case of processing the high definition video signal are set to near frequencies.